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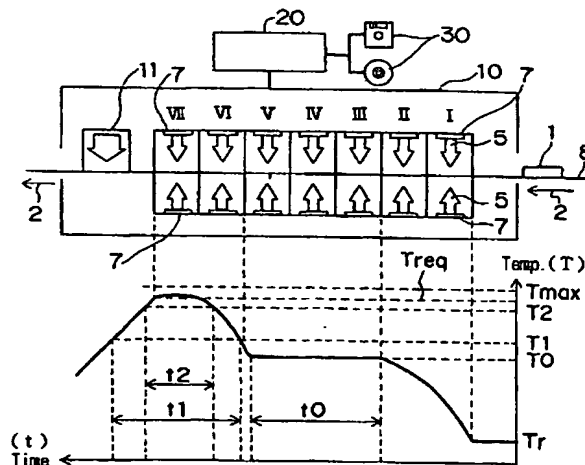
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(54) Title: METHOD, APPARATUS AND PROGRAM OF THERMAL ANALYSIS, HEAT CONTROLLER AND HEATING FURNACE USING THE METHOD



(57) **Abstract:** Heating characteristic value at any measuring point of an object at any measuring location of an heating furnace is determined as a single invariable by using temperature (T_{int} and T_s) measured at the measuring point of the object and heating temperature (T_a) and heating time (t) at the measuring location of the heating furnace. The heating characteristic value (m -value) may be calculated without using physical characteristics of the object. By using the m -value, temperature profile of the object heated under modified heating condition may be simulated in a short period of time without actually heating and measuring temperature of the object at high accuracy level. By using such simulation, appropriate heating condition for heating an object in accordance with desired heating condition may easily be determined.